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ABSTRACT

States must ensure that persons inadequately served by vocational education programs, particularly the disadvantaged, have equal access to vocational education. The methods of assuring compliance with federal regulations mandating equal access that are reviewed in this document are intended to be adapted or adopted by state and local administrators, vocational education teachers, and counselors. The first section discusses the educational, financial, social, and environmental factors that contribute to being disadvantaged. The legislative foundation for disadvantaged individuals in vocational education is examined, with special emphasis on legislation pertaining to academically and economically disadvantaged and limited English proficient individuals. A section on program planning and instruction discusses the special problems faced by disadvantaged students in the areas of academic achievement, functional curriculum, and generalizable, basic, vocational readiness, employability, and study skills; it outlines strategies that have proven effective in helping disadvantaged persons acquire these skills. The next section deals with the following supportive services and special staff: counseling, career development plans, peer tutoring and cooperative learning, cooperative planning, and resource personnel. Thirteen specific recommendations for working with disadvantaged students in vocational education programs are provided. (MN)

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IN 329

Vocational Education Programs for the Disadvantaged

By
Michele D. Sarkees
Lynda L. West
Jerry L. Wircenski

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VOCATIONAL EDUCATION PROGRAMS FOR THE DISADVANTAGED

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FOREWORD

States must ensure that persons inadequately served under vocational education programs have access to these vocational education programs. Vocational Education Programs for the Disadvantaged analyzes and synthesizes methods used by state and local education agencies to provide assurance of compliance with federal regulations.

Assurances of compliance may be provided through a review of policies, procedures, and admissions criteria; analysis of enrollment trends; development of nondiscriminatory policies and procedures; and development of plans to correct noncompliance. The methods reviewed in this paper can be adapted or adopted by administrators at state and local levels, by vocational education teachers, and by counselors to determine existence of barriers and possible means of correcting inequities.

The profession is indebted to Michelle D. Sarkees, Lynda L. West, and Jerry L. Wircenski for their scholarship in preparing this paper. Dr. Sarkees is Associate Professor, Division of Vocational Education, University of Georgia in the area of vocational education for special needs learners. Dr. West is Associate Professor, Departments of Practical Arts and Vocational-Technical Education and Special Education, University of Missouri-Columbia. Dr. Wircenski is Professor, Trade and Industrial Education, at North Texas State University.

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EXECUTIVE SUMMARY

Vocational Education Programs for Disadvantaged Youth helps educators ensure that disadvantaged youth have equal access to vocational education programs by reviewing characteristics of disadvantaged youth and the definitions and classifications of the term; describing the problems of disadvantaged youth; and offering strategies for addressing the problems.

Educational, financial, social, and environmental factors contribute to youths' being considered disadvantaged. Educational factors center on the tendency to leave school before graduation. Financial factors related to dropping out include higher unemployment rates, lower earnings, and employment in semiskilled or unskilled jobs. Social and environmental factors that characterize disadvantaged youth include these family characteristics: poor, single parent, and unemployed or menially employed parent. Residential environments for many disadvantaged youth are characterized by high crime, vandalism, drugs, and juvenile delinquency.

Legislation addressing disadvantaged youth began with the Education Act of 1963, in which it was recommended that students with special needs related to being disadvantaged or handicapped be served by vocational education programs. The Vocational Amendments of 1968 required that each state use a given percentage of its basic grant to pay for services and programs for persons who have academic, socioeconomic, or other handicaps that prevent them from succeeding in regular vocational programs. . . . The Carl D. Perkins Vocational Education Act ensures that vocational educators address the needs of individuals inadequately served under vocational education programs. Of the several classifications of disadvantaged populations defined and described in the legislation, three are considered in this paper: academically disadvantaged, economically disadvantaged, and limited-English-proficient youth.

Research reveals a high positive correlation among low school achievement, low income youth, and racial minority youth. Program planning and attention to instruction are essential in meeting the needs of these disadvantaged youth. Considerations offered for program planning include the following:

- Maintain clarity in first-day organization and planning
- Keep students on task through time management
- Establish school policies related to effective instruction in basic skills
- Provide ongoing staff development
- Hold cooperative meetings involving vocational teachers, special needs coordinators, remedial academic teachers, and counselors
- Encourage parents to participate in the planning and evaluating of their child's educational program

Recommendations for improving programs for disadvantaged students are as follows:

- Consider all factors that affect students' educational programs, including economic, health, cultural, and linguistic factors in addition to academic disadvantages.
- Establish programs that incorporate parents in the educational planning process for disadvantaged students.
- Establish a better tracking mechanism for dropouts, including outreach.
- Expand programs and services to an earlier age.
- Emphasize generalizable skills in academic and vocational curricula.
- Improve interagency coordination.
- Establish alternative educational delivery strategies for dropouts.
- Publicize and expand instructional strategies and models that work well with disadvantaged populations.
- Implement a comprehensive career development and employability skills process for disadvantaged students.
- Use successful individuals who come from disadvantaged populations as role models.
- Establish a clearinghouse for information and contacts for dropout prevention.
- Expand services available to disadvantaged students.

INTRODUCTION

One of the consequences of attempting to describe the disadvantaged is a tendency to overgeneralize. It is important to remember that each disadvantaged learner is an individual, and that each individual has certain unique characteristics that can be drawn together into a composite profile. It is impossible to gain a picture of the typical disadvantaged learner; nevertheless, there are several contributing factors, educational, financial, social, and environmental, that impact upon the disadvantaged. The literature which surrounds the disadvantaged population uses terms such as students who are at-risk or potential dropouts. The problem, nevertheless, is basically the same, providing a positive, educational environment which will assist at-risk and disadvantaged students who are potential dropouts in obtaining quality programs, instruction and support services to eliminate educational barriers in education, or at least, reduce the magnitude of the barriers and improve the student's chances for success.

For almost three decades the academically disadvantaged, economically disadvantaged, and limited-English proficient have looked to vocational education to alleviate the problems of alienation from the education mainstream, to interrupt the cycle of dropping out of school, unemployment and poverty.

It was this concern for equality of opportunity for disadvantaged youth that is the spirit of the Carl D Perkins Vocational Education Act, Public Law 98-524. The Carl D. Perkins Vocational Education Act provides assurances for the disadvantaged that (1) equal access will be provided in recruitment, enrollment and placement activities; (2) special services including adaptation of curriculum, instruction, equipment and facilities designed to meet the needs described in clause one; (3) guidance, counseling, and career development activities conducted by professionally trained counselors who are associated with the provisions of such special services; and (4) counseling services designed to facilitate the transition from school to post-school employment and career opportunities (Section 204).

Public Law 98-524 mandates assessment, quality instruction, and support services to special populations who have historically, for various reasons, encountered barriers to accessing or succeeding in vocational education over the years. In an effort to reduce and/or minimize the barriers that the disadvantaged face, the monograph outlines and identifies topics and issues related to disadvantaged students being prevented to pursue improved educational opportunities and experiences.

Educational Factors

One of the most difficult issues to isolate is the reason(s) disadvantaged students are at greater risk of dropping out of the educational system. Literature has concluded that yes, indeed, the disadvantaged student is at greater risk of dropping out, even though data sources in this area are less reliable and differ widely from each other.

One of the common threads that does appear to bond many disadvantaged learners together is the potential to leave school before graduation. In fact, the High School and Beyond Study (U.S. Department of Education 1985) found that the disadvantaged were three times more likely to drop out when compared to the non-disadvantaged. There are many estimates of the number of students who will drop out of school before graduation. The variation in the percentage of dropouts is a result of the difficulty that school districts have in tracking students who leave school or their attendance area. Furthermore, the definition of the term "dropout" often varies from state to state, district to district and sometimes from school to school within the same district!

The United States General Accounting Office (GAO) in its briefing to Congress in June 1986 reported on school dropouts and the extent and nature of the problem. They stated in their report that there are many estimates of the number of dropouts in the nation. National surveys provide education progress information from samples of the youth population. School district administrative records, in contrast, lose track of many students who leave the school or geographic area. Thus, the various national surveys provide representative estimates of the extent of the dropout problem among various subgroups, whereas school district data must be viewed with some skepticism because districts do not have complete information on many students (U.S. General Accounting Office 1986, p. 5).

The report indicated that school districts differ in the procedures they use to define dropouts and calculate dropout rates. For example, some school districts count as dropouts students who have moved to other areas and enrolled in other schools; some exclude private school enrollment; others count students in school who have transferred to night school and later dropped out. School districts may look at the number of youths who entered the fifth grade, compare it to the number graduating eight years later, and consider the difference to be dropouts. Because of limited personnel time, administrative records of school districts inherently are limited in tracking youths who leave the school in their districts before graduation. In April 1986, in an overview of the dropout issue by the Congressional Research Service (U.S. Congress 1986), it was pointed out that there is no single reliable measure of the national dropout rate. It also noted that the use of different definitions and procedures to count the number of dropouts makes useful data difficult to obtain (p. 12).

In an attempt to counter the problem of determining just exactly who are the disadvantaged, the U.S. General Accounting Office has a broad definition employed by the Current Population Survey (CPS). The Current Population Survey defined dropouts as individuals who are not enrolled in schools nor are they graduates. Employing this definition, the Current Populations Survey data revealed that there were approximately 4.3 million dropouts aged 16-24 (U.A. Bureau of Labor Statistics 1985). Data from the National Longitudinal Surveys of Labor Market Experience (1984) showed that among youth aged 18, during the period 1979-1982, about 15 percent of whites, 17 percent of blacks, and 31 percent of Hispanics failed to complete high school. The current national estimate suggests about 25 percent of the fifth graders currently in school will not make it through high school graduation. These data varied by geographic region. According to data from the High School and Beyond Study (U.S. Department of Education 1985), dropout rates for white youth from public schools were higher in the southern and western regions of the United States as compared to the northeast and north central regions. For blacks, the dropout rates were higher in the northeast and north central regions. When examining the data for Hispanics, there were few regional differences. Regardless of which ethnic group is examined, dropout rates were higher in cities than in suburban and rural areas.

It is evident that there is no single reason why disadvantaged learners leave school before graduation. In data reported by the U.S. Department of Education, National Center for Education Statistics (1983) youth who drop out of school do so for various reasons—school was not for them, 33.1 percent; poor grades, 33 percent; offered job or chose to work, 19.5 percent; marriage, 17.8 percent; didn't get along with teachers, 15.5 percent; had to support family, 11.1 percent; pregnancy, 10.9 percent.

Borus and Carpenter (1984) found that youth who dropped out of school had a correlation with the following traits—being 2 or more years behind grade level, being pregnant, coming from households where the mother or father was not in the home when the youth was age 14, coming from a household where the father dropped out of school, having relatively little knowledge of the labor market. These findings correspond to those of the Youth Incentive Entitlement Pilot Projects (Cook and Reesman 1984) where researchers found that for low income youth the characteristic most strongly associated with the greatest probability of not completing high school by age 20 was being one year or more behind expected grade level at ages 16.5 to 17.5 years. In analyzing data from the Youth in Transition Project (Bachman et al. 1971), it was shown that in addition to factors such as low classroom grades, grade failure and negative school attitudes, delinquent behavior in the middle school years was also a powerful indicator of potential for leaving school before graduation.

Financial Factors

Disadvantaged students who are at risk and in danger of dropping out of school typically face a set of circumstances related to financial factors that complicate their education and ultimately their opportunities for employment. Vocational education for the disadvantaged offers work experience, skill training, and support services intended to counterbalance the employment consequences of dropping out.

An examination on the employment data on high school dropouts in the labor market reveals succinctly the consequences facing disadvantaged learners who leave school before graduation. For the high school dropout, the unemployment rates are far higher than for those who graduate. The employment situation for black high school dropouts is worse than for their white counterparts. According to the United States General Accounting Office (1986) their fate is worse today than 20 years ago. The unemployment rate for black youth has risen since the 1950s and continues to do so. For example, in 1972 the unemployment rate for black teenagers was 35 percent. In April, 1986, it had risen to 43 percent. According to the Current Population Survey (U.S. Bureau of Labor Statistics 1985), approximately 25 percent of high school dropouts ages 16-24 were unemployed compared with about 10 percent of high school graduates. In addition, a large proportion of dropouts do not even seek work. In this same study it was found that only 68 percent of the dropouts were in the labor force in contrast to 87 percent of high school graduates. There were also sharp differences in the extent of the labor force participation and unemployment for women dropouts versus graduates. Approximately one half of female dropouts were in the labor force in October 1985 compared to 80 percent of the high school graduates. Data from the National Longitudinal Surveys of Labor Market Experience (Morgan 1984) showed that among youth aged 18-22 in 1979 who were not enrolled in school, dropouts had an unemployment rate that was almost three times the rate of high school graduates.

For those dropouts who are successful in securing employment, their earnings are lower and they are more likely to be employed in semiskilled manual labor types of jobs. According to the Current Population Survey data (U.S. Bureau of Labor Statistics 1985), the mean income for men and women 25 years or older who had not completed high school was about one third lower than

those who had graduated. Data from the National Longitudinal Surveys of Labor Market Experience (1984) showed that obtaining a high school diploma by 1980 (or before) was worth an additional $1500 in 1981 earnings for young women and $1600 for young men after controlling for a variety of differences between dropouts and graduates.

Social and Environmental Factors

The difficulties of daily living for disadvantaged youth, whether they reside in the inner city or rural America, are often overwhelming. Disadvantaged youth commonly come from poor families, from single parent families, from families where at least one parent is unemployed or menially employed. Disadvantaged youth come from families where they receive less parental attention and are often left on their own at a very early age. Many reside in environments characterized by high crime, vandalism, drugs, and juvenile delinquency. Dropping out of school before completion can have adverse consequences for society in general in such areas as additional welfare costs, crime, and poor health. It has been estimated that the current dropouts annually cost the United States $3 billion in welfare payments alone (*Dropouts: A Summary of National, State, and Local Information* Undated). In the state of Texas, for example, the current dropout problem is estimated to be costing the state $17.12 billion in forgone income and lost tax revenues, increased costs of welfare, crime, incarceration, unemployment insurance, and placement and adult training and education. Conversely, every dollar invested in educating potential dropouts is estimated to result in a return of $9. Weber and Mertens (1987) estimate that each high school dropout costs society a minimum of $26,000 over his or her worklife. Howe (1985) points out that it costs nearly $500 to provide a year of compensatory education to a student before he or she gets into academic trouble, whereas it costs $3,000 when one such student must repeat one grade.

The links between school dropouts and crime, i.e., school vandalism and drug abuse, are very strong. Dropouts are reportedly six to ten times more likely to be involved in criminal activity (*Dropouts: A Summary of National, State, and Local Information* Undated). According to one state's dropout report, 85 percent of all prison inmates in the United States were high school dropouts (ibid.). The FBI reports that the rate of violent crime among juveniles has doubled in the last two decades (Sherraden 1986). Young people under age 21 still account for more than half of all arrests for serious crimes. School vandalism alone was estimated by a Senate Subcommittee to cost $500 million a year and it has been suggested by a major national study that American youth use more drugs than the young people of any other industrialized nation (as cited in Sherraden 1986). A report of the Select Committee on Narcotics Abuse and Control (U.S. Congress 1986) found that a relationship exists between drug abuse and dropping out.

LEGISLATIVE FOUNDATION FOR DISADVANTAGED INDIVIDUALS IN VOCATIONAL EDUCATION

In an attempt to react to the criticisms about the inequalities of educational opportunity for disadvantaged youth, Congress in the 1960s passed a series of vocational education legislative acts designed to strengthen the public education system. These acts called attention to students who found it difficult to succeed within traditional classes or courses, many of whom either were far behind in basic educational skills or already had been pushed out or dropped out of school.

It is important to highlight some of these federal acts in vocational education that have formulated characteristics and attempted to identify and define disadvantaged learners. There are numerous legislative acts outside the domain of vocational education that impact on programming and services for disadvantaged learners. For the purpose of this monograph, the focus of the discussions shall be limited to those legislative acts directly associated to vocational education.

The first of this legislation began with the Education Act of 1963. This act was the first step in delivering vocational services to the disadvantaged. However, the 1963 Act merely recommended that students who have special needs related to disadvantaged or handicapped conditions be served by vocational education programs.

The Vocational Amendments of 1968 went far beyond this recommendation by relating appropriations to objectives. The 1968 amendments required the state to spend at least 15 percent of their basic state grant to pay for services and programs for academic and socioeconomic disadvantaged. The 1968 amendments also provided a definition for the term disadvantaged. The term was defined as "those persons . . . who have academic, socioeconomic or other handicaps that prevent them from succeeding in regular vocational programs."

Title II of the Vocational Amendments of 1976 required that 30 percent of the basic state grant be spent for necessary special services and programs, 20 percent for the disadvantaged. None of these early federal directives has had the impetus for creating a far-reaching impact on vocational education for the disadvantaged as has the current Carl D. Perkins Vocational Education Act of 1984 (P.L. 98-524).

The purpose of the Carl D. Perkins Act was to better serve certain individuals who, under earlier legislative mandates, had been inadequately addressed. This includes the disadvantaged, handicapped, men and women entering nontraditional occupations, adults in need of training or retraining, single parents or homemakers, individuals with limited English proficiency, and individuals who are incarcerated in correctional institutions. Of the funds available under title II, part A of Public Law 98-524, 10 percent is allocated for handicapped individuals, 22 percent for disadvantaged individuals, 12 percent for adults who are in need of training or retraining, 8.5 percent for single parents and homemakers, 3.5 percent for individuals who are participants in programs designed to eliminate sex bias and stereotyping, and 1 percent available for criminal offenders.

As in the past, the only basis for identifying students as disadvantaged should be their need for supportive services or special programs designed to meet their unique needs in order to enable

them to succeed in vocational education. Furthermore, each student should be identified as an individual who has not been able to succeed in the conventional education system rather than as a member of a particular ethnic or socioeconomic group. With this in mind, some general characteristics are presented as guidance for each of the groups classified as disadvantaged according to the Carl D. Perkins Vocational Education Act. The groups of individuals included under the term "disadvantaged" are the academically disadvantaged, economically disadvantaged, limited-English proficient individuals, criminal offenders, single parents and displaced homemakers. For the purpose of this monograph, the term "disadvantaged" shall be confined to academically disadvantaged, economically disadvantaged, and limited-English proficient individuals.

Academically Disadvantaged

Academically disadvantaged individuals are defined as those who score below the 25th percentile on a standardized achievement or aptitude test, whose secondary school grades are below 2.0 on a 4.0 scale, or fail to attain minimal academic competencies. Academically disadvantaged youth typically have a long history of academic failure and many have already dropped out of school. As a result, their aptitude and achievement test scores are usually much lower than their peer group.

Another consequence of poor academic performance is failure in the important basic skill courses of English, mathematics, and science. Many disadvantaged students are already a grade level or two behind their age group in class standing. The academically disadvantaged often come to the educational environment from a different cultural or ethnic background. Academically disadvantaged students typically display language or communication problems in school. These problems may include a limited English proficiency, poor oral and/or written communication skills, poor grammar, or poor vocabulary skills.

Economically Disadvantaged

Economically disadvantaged individuals are defined as those who come from a family whom the state board of each state has identified as low income on the basis of uniform methods, such as annual income at or below the official poverty level, eligibility for reduced-price school lunch, eligibility for Aid to Families of Dependent Children or other public assistance programs, or receipt of Pell grant or other comparable state programs of need-based financial assistance or eligibility for participation in programs assisted under title II of the Job Training Partnership Act (P.L. 98-524).

The economically disadvantaged can be found in almost every part of the country, but certain areas or regions have a chronically low level of economic activity or a deteriorating economic base that has caused adverse effects such as a rate of unemployment that has exceeded by 50 percent or more the average rate of unemployment in the state or in the nation for each of the three years preceding the year for which such designation is made; or a large concentration of low income families, and for which such designation for the purpose of this act is approved by the secretary as consistent with these and other criteria as may be prescribed.

The fate of the economically disadvantaged is oftentimes inseparable from that of the academically disadvantaged, for often they are one and the same. Nevertheless, economically disadvantaged youth come from a home environment with an extensive record of unemployment or minimal employment. Usually, as a consequence of poor academic and/or vocational training, the economically disadvantaged lack the necessary education to break the cycle of unemployment, poor

health, poor nutrition and hygiene, welfare, substandard living conditions, or even poverty. Many of the parents are single parents, most often females, who lack essential entry level skills for jobs that require more than manual unskilled labor. Many come from homes where one or both parents have not completed high school.

Limited English Proficiency

Individuals classified as limited English proficient are in many respects very similar to academically or economically disadvantaged individuals. The definition of limited English proficiency includes individuals not born in the United States or whose native language is a language other than English, individuals from environments where a language other than English is dominant, and American Indian and Alaskan native students who come from environments where a language other than English has had a significant impact on their level of English proficiency.

Many limited-English proficient youth bring to the educational environment a sporadic history of poor performance. This poor performance is reflected in the high rate of absenteeism and tardiness and, as a result, limited-English proficient students often have a high probability for dropping out of school before graduation. As expected, a high percentage of limited-English proficient students have difficulty with written and/or oral communications when in school. Oftentimes, they just cannot adjust to the cultural and language difference presented in the educational environment. The home-life environment of limited-English proficient students is often a reflection of that of the economically disadvantaged. Living conditions are usually less than satisfactory, overcrowded, substandard, or perhaps even poorer housing. Like disadvantaged students, many limited-English proficient youth come from homes where parents have no employment history or poor employment histories, parents are unskilled, and low pay service oriented occupations with limited advancement opportunities is the norm.

PROGRAM PLANNING AND INSTRUCTION

The next decade in teaching will undoubtedly be one of great challenge. Factors such as dwindling student population, increasing class sizes, decreasing budgets, decreasing test scores, increasing parent expectations, higher dropout rates, and greater numbers of disadvantaged students will affect all areas of educational planning and instruction.

As far back as 1964 a set of characteristics and general conditions that describe disadvantaged youth was identified in the literature: (1) contradictory attitudes toward self and others; (2) low level aspiration and motivation toward academics; (3) weaknesses in utilization of abstract symbols and cognitive processes; and (4) social-cultural patterns that differ from traditional standards. These characteristics have not significantly changed in two decades. The factors that appear to be most important throughout history are as follows:

- Consistent failure to achieve in regular school work
- Grade level placement two or more years below average age for grade
- Irregular attendance and frequent tardiness
- Overt antagonism to teachers and principals
- Marked lack of interest in school, with feeling of not belonging
- Low scholastic aptitude
- Low reading ability
- Frequent changes in schools
- Nonacceptance by school staff
- Nonacceptance by schoolmates
- Friends much younger or older
- Unhappy family situations
- Marked difference from schoolmates in size, interests, physique, social class, nationality, dress, or personality development
- Inability to afford the normal expenditures of schoolmates
- Nonparticipation in extracurricular activities

- Inability to compete with, or ashamed of, siblings
- Performance consistently below potential
- Discipline
- Record of delinquency

Stallings et al. (1979), conducted a study of secondary teachers to determine effective strategies for helping low achieving secondary students succeed. This study cites several variables that should be considered in planning effective programs for disadvantaged students, including clarity in first-day organization and planning, keeping students on task through time management, establishing school policies related to effective instruction in basic skills, and providing ongoing staff development. Specific techniques were identified as follows:

- Teachers should make rules, consequences, and procedures clear on the first day of class.
- Teachers should monitor students and follow through with consequences for those who did not comply with the rules.
- Teachers should establish a system of student accountability and responsibility.
- Teachers should be able to organize and implement a variety of instructional activities during a class session.
- Teachers should augment instruction by giving examples, exploration, and relating to student experiences.
- Oral reading in small groups can assist low achieving students, especially when technical terminology is involved. This strategy can help students in comprehending new material and clarifying questions regarding content.
- Study habits should be introduced and reinforced with students.
- Brief discussions and review sessions should be scheduled at the end of each class session to provide closure and a feeling of accomplishment for students.
- Interactive instruction is effective with disadvantaged students. The elements of interactive instruction include oral instruction for new work, reviewing and discussing student work, and providing practice activities.
- Teachers should learn to handle incorrect responses to questions in a supportive manner in order to avoid damaging student self-concept. Questions should be asked at a level on which the student is most likely to succeed. If an incorrect response is given, the question can be rephrased or a clue can be given.
- School policies should be related to effective basic skills instruction. Some successful practices include consistent expectations for students (e.g., absences, tardiness, misbehavior), emphasis on student potential (e.g., weekly/monthly awards for achievement or attendance), teacher willingness to see students for personal assistance, and open communication and feedback between students and teachers.

- Teachers should be provided with updated information on diagnostic and prescriptive materials (e.g., basic skills materials, vocational curriculum materials written on a lower reading level, material on audio tapes) as well as effective strategies in working with disadvantaged students through inservice workshops. Staff development should be continuous and coordinated in order to effect change.

- Cooperative meetings involving vocational teachers, special needs coordinators who work with disadvantaged students, remedial academic teachers, and counselors should be held periodically to share information, exchange ideas, and plan appropriate services for disadvantaged students enrolled in vocational education.

- Parents should be encouraged to participate in the planning and evaluating of the educational program for their son or daughter.

These recommendations should be taken into consideration in planning vocational education programs for disadvantaged students. They are recommendations that have strong implications for administrators who design programs, as well as for educators who implement programs. Program planning is essential to developing sound school policies and a positive philosophical approach to providing quality instruction to all students, disadvantaged and nondisadvantaged alike. Yet program planning is only a part of the whole. Without cooperative teachers, counselors, and support personnel to implement the designed program, program planning will not translate into quality instruction or have the desired outcome that generated program planning in the beginning.

Student Achievement

Epps (1975) believes that there are several factors that have major implications for teachers of disadvantaged students. These factors are motivation, self-concept of ability, and sense of personal adequacy. Epps believes that need for achievement, which he calls "hope for success," will cause a student or an individual to strive for success whenever performance can be evaluated against a standard of excellence and there can be a realistic chance to succeed. However, he believes that an individual will experience anxiety when his or her performance can be evaluated against the standard of excellence and, therefore, will prefer to avoid the situation. When a student cannot avoid this kind of situation, such as in a school test, the level of anxiety may lead to low performance (p. 151). Any individual who is oriented to fear of failure is afraid of competition and evaluation, because failure is so very painful. Psychologists have generally concluded that high levels of anxiety produce interfering response patterns that lead to impaired performance.

Epps states that research results from elementary school, junior high school, and senior high school, and college strongly support the statement that children with low anxiety perform better than those with high anxiety on tests and in class, as well as on experimental tasks. Results usually indicate that highly anxious students do well on easy tasks, but perform poorly on complex learning tasks (p. 152).

With regard to motivation, Epps believes that teachers, after parents, are the source of the most important adult/child interpersonal relations. He says that if teachers withhold rewards (positive reinforcement) while dispensing negative reinforcement (punishment and criticism), children's anxiety will, in all probability, increase (p. 153).

Epps believes that a student's perceived probability of success is his or her self-concept. He states that academic self-esteem or self-concept of ability has long been thought to be related to school achievement. He is not certain, however, which comes first: academic success or academic

self-confidence. He states that success builds upon success, thereby increasing the likelihood that future academic efforts will be successful (p. 154). He does believe, however, that self-esteem is directly related to social status as well as school performance. He states that there is a strong positive relationship between general self-esteem and that self-esteem which is specific to academic performance. Therefore, general self-esteem of a child entering school for the first time may, however, be crucial for his or her adaptation to the academic success. Therefore, of course, it is crucial for the student to receive reinforcement for his or her efforts early in his or her school career. The early success reinforces self-confidence and enhances self-esteem to academically relative behaviors (p. 155). The student who is initially less self-confident approaches new tasks reluctantly. It is also likely the student will be less persistent in his or her efforts to meet school demands, and as a result will receive fewer rewards for academically relevant behaviors. Students who have a lack of self-confidence, which is generally associated with anxiety, have low expectations of the school situation and have a tendency to withdraw. The tendency to withdraw may be characterized by apathy, daydreaming, dependency, absenteeism, disruptive behavior, or some combination of these (p. 155).

Epps believes that parents serve as mediators or negotiators between the child and the community, interpreting community values and standards for the child in helping the child evaluate his or her status relative to others in the community. The interaction with teachers and peers at school, in addition to the immediate family, provides evidence relative to school and social status. If the child perceives a preponderance of low ratings among these evaluations, he is likely to develop a low overall self-evaluation, which Epps calls a general self-esteem (p. 156).

Epps believes that importance of self-esteem to a large extent reflects the culture or subculture to which that individual belongs. In a subculture that places much importance on educational accomplishments, excellence in school carries more weight in total self-esteem than in subculture that places little importance on educational accomplishments. Often, Epps says, a child's view of importance of educational excellence is a reflection of his parents' educational values (p. 156). Epps summarizes his beliefs in this way: The child learns to value academic skills or not to value them from his parents, siblings, and peers. His or her values influence the amount of effort he or she puts into academic pursuits. Those efforts are evaluated by parents, teachers, siblings, and peers. Whether he or she perceives these evaluations to be favorable or unfavorable depends on the extent to which he or she is rewarded for those efforts. If rewards are frequent, then the self-evaluation will be favorable. However, if he or she is more often unrewarded for his or her efforts, then the net self-evaluation will be unfavorable (p. 157). Epps' reference to a sense of personal adequacy refers to the characteristic shown by individuals who believe that their own skill, rather than luck or chance, causes success and/or failure. The belief is that people who have a strong need for achievement also have a strong belief in their own skill or ability, and that will determine the outcome of the events in which they are involved. In other words, Epps says, high motivation for achievement is associated with the ability to accept responsibility for one's successes (p. 159).

Functional Curriculum

Functional curriculum is an instructional approach referred to in transition from school to work literature. It refers to teaching basic skills through a "real life" perspective by utilizing the community setting, guest speakers, field trips, and problem-solving activities. Disadvantaged students frequently fail to see the relevancy of the curriculum to their world of reality. Educators who identify the skills and competencies taught in the classroom to the outside world increase a student's motivation to master the skill being taught.

Vocational education is a natural setting for functional curriculum. Every vocational program prepares students with occupational skills that enable students to enter the labor force and live independently. The purpose and stated objectives of vocational education support the functional curriculum concept. Functional curriculum includes skills and competencies that will improve the academically and economically disadvantaged opportunities to learn and earn.

With the dramatic rise in dropouts, educators are evaluating the curriculum and the educational environment in general. The evaluation of society's educational system reaffirms a need for a more effective approach to learning. The functional curriculum approach is the most practical approach to instruction for disadvantaged students.

Generalizable Skills

When planning a functional curriculum, generalizable skills should always be included. A generalizable skill is one that is basic, necessary, and transferable within and/or across vocational programs. Basic skills are commonly believed to be necessary for a success in vocational programs and employment (Greenan 1986). The National Commission on Secondary Vocational Education (1984) cited the following reasons vocational education programs can teach and reinforce basic or generalizable skills:

- Students are motivated by being involved in relevant activities.
- Students put basic skills to practical use while participating in laboratory activities.
- Individualized instruction in vocational programs allows students to progress at their own pace and provides immediate feedback.
- Involvement in group projects provides students with an opportunity to improve basic interpersonal relations and work skills.
- Vocational education experiences provide meaning for academic subject areas and help students see the relationship among them.
- Vocational education allows students to use tactile and kinesthetic senses in the learning environment. This stimulates student motivation and provides concrete demonstration of basic and abstract skills.

Greenan (1986) has identified 115 generalizable skills in four areas that are basic and necessary for student success in vocational programs and future employment: mathematics skills, communication skills, interpersonal relations skills, and reasoning skills. Proficiency in these basic skills does not necessarily guarantee that students will achieve occupational success. However, possession of these skills will definitely increase the students' chances of obtaining entry level employment and transferring from one occupational setting to another.

Mathematics skills include—

- whole numbers,
- fractions,
- decimals,

- percent,
- mixed operations,
- measurement and calculation,
- estimation.

Communication skills include—

- words and meanings,
- reading,
- writing,
- speaking,
- listening.

Interpersonal relations skills include—

- work behaviors,
- instructional and supervisory conversations,
- general conversations.

Reasoning skills include—

- verbal reasoning,
- problem solving,
- planning.

Three major assessment strategies have been developed and tested to measure the generalizable skills of students in vocational education programs. These tools include student self-ratings, teacher ratings, and performance measures. They can be used to provide the following information:

- Counseling information to help students recognize their strengths and limitations
- Specific points for developing learning prescriptions for students
- Assistance to students in learning more about their chosen vocational program
- Content for instructional objectives, planning activities and appropriate evaluation strategies. (Greenan 1986)

Generalizable skills are a list of skills designed to assist students who are at a disadvantage by the absence of these skills. In order to better prepare students for success in education, vocational education, and employment, instruction should focus on generalizable skills to enhance a student's chances for success.

Basic Skills

Basic skills, consisting of reading, mathematics, writing, and oral communication skills, are part of everyday life. Focus on the development of basic skills in public education continues to increase, especially in light of the high rate of illiteracy, the dropout rate, and the low scores of students on basic skills achievement tests.

Dunn, Gray, and Martini (1987) suggest that reading emphases should be incorporated into vocational curricula so that students can—

- read for facts;
- read for instruction (procedures, directions, processes);
- reading for ideas (cause and effect, general concepts, technical concepts);
- reading to infer meaning (use context clues, analyze unfamiliar words);
- read to generalize (extending applications from given facts);
- read to detect inconsistency, illogical conclusions, author bias.

Thornton (1980) recommends that the following areas be addressed in the future concerning basic reading skills in vocational programs:

(1) Collect literature in an occupational area, relating it to tasks within that area, and identify the reading skills necessary to master the literature.

(2) Work actively with employers to determine their perceptions of the amounts and kinds of reading their employees must be able to master and/or transfer laterally.

(3) Develop a readability index applicable to the requirements of vocational reading.

(4) Examine the requirements for general literacy and occupational literacy so that a comparison can be made.

(5) Design models to provide instruction which will identify and group skills necessary to facilitate transferability among job clusters.

(6) Examine the reading requirements of occupations in terms of upward mobility.

(7) Acknowledge the importance of reading in vocational education as well as the responsibility to provide vocational personnel with the skills which would enable them to address reading in their programs.

(8) Establish employment potential and survival needs for special needs students who lack reading skills.

(9) Develop coordinated strategies to coordinate functional literacy in both academic and vocational delivery systems.

Dunn, Gray, and Martini (1987) suggest that mathematics emphases should be incorporated into vocational curricula so that students can—

- perform whole number operations (addition, subtraction, multiplication, division);
- perform fraction operations (addition, subtraction, multiplication, division);
- perform decimal operations (addition, subtraction, multiplication, division);
- perform measurement (linear measurement, area measurement, volume, weight measurement);
- perform numeric relationships in conversion (fractions to decimals, fractions to percents, decimals to percents);
- perform linear equations;
- perform problem solving skills.

Long (1980) makes the following observations and recommendations regarding mathematics and vocational education:

Observations

- Many of today's youth have deficiencies in fundamental mathematic skills.
- The typical citizen desires that basic skill deficiencies be remedied.
- A person's vocational skills at the minimum are required for optimum success in vocational study.
- A person's vocational development, in the long run, is inhibited by deficiencies in fundamental academic skills, including mathematics skills.
- Support for attention to basic mathematics skills in relation to vocational study seems to be found in both the mathematics and vocational disciplines.
- Information pools and the literature are rich with reports of activities attending to basic skills in relation to vocational mathematics.
- There is a paucity of rigorously defined data that document the critical relationships between specific mathematics skills and specific occupations.
- The appeal of mathematics may be increased, and fear or apathy may be reduced, for vocational students, by demonstrating the relevance of mathematics subject matter to occupations and careers.

- Teachers of mathematics would profit from experiences that promote awareness of the levels of mathematics required in trade and technical areas.

Recommendations

- Further curricular and instructional collaboration should occur between vocational and mathematics educators to promote basic skill development.
- Career education should be considered as a possible organizing theme for collaborating on basic skill development activities.
- Educators should use their individual and collective expertise to promote developmental research.

Dunn, Gray, and Martini (1987) suggest that written communication emphases should be incorporated into vocational curricula so that students can—

- utilize key vocabulary/technical terms;
- write brief messages;
- write phrases, sentences, and paragraphs;
- construct letters and formal messages;
- apply the mechanics of capitalization, spelling, and punctuation;
- use legible handwriting;
- alphabetize;
- use written grammar correctly;
- select appropriate vocabulary words when writing.

Dunn, Gray, and Martini (1987) suggest that oral communication emphases should be incorporated into vocational curricula so that students can—

- comprehend the literal meaning of a message;
- infer a speaker's true meaning;
- detect unspoken messages (body language, tone of voice, emotion, inconsistent facts);
- select appropriate words when speaking;
- speak face to face with another person;
- conduct a conversation over the phone.

Basic skills are the foundation of education for students who have barriers to employment. Vocational instructors generally depend upon other educators to provide basic skills instruction to

students in order that vocational programs can focus upon occupationally specific skills. However, students do not always enter vocational programs having mastered the basic skills. It is necessary for disadvantaged students to have preparation in vocational readiness skills.

Vocational Readiness Skills

Vocational readiness skills are competencies designed to better prepare students planning to enroll in vocational programs. The acquisition of these skills will enable disadvantaged students to enter their vocational programs with increased opportunity for success. Teachers provide these skills through direct instruction to students preparing for entrance into vocational education. The need for access skills might be exemplified in a student who wants to enroll in building trades. Direct instruction would be provided in measurement—how to read a ruler to 1/16 of an inch. Building trades instructors generally expect basic measurement skill mastery. Building trades instructors would also expect a student to know the names of common, household tools when students enter the program. However, disadvantaged students may come from homes where household tools were not used or even available. Therefore, direct instruction is required prior to entrance into a building trades program.

Employability Skills

Wircenski (1982) defines employability skills as "those essential cognitive and affective skills that are necessary for successful transition from school to work. These are skills that are essential for employment, job seeking, job placement and job retention" (p. xviii). Many disadvantaged students will be lacking employability skills.

Employability skills can be organized into the following major areas:

(1) Socialization skills—designed to help students with peers, employees, teachers, and parents in relationship to—

- personal organization,
- neatness and orderliness,
- keeping a file,
- personal grooming,
- getting along with others,
- accepting differences in others,
- responding to authority,
- acceptance of authority.

(2) Communication skills—designed to assist learners in improving their oral and written communication skills in relationship to—

- personal letter writing,
- business letter writing,
- interpreting oral orders/directions,
- following orders/directions in correct sequence,
- interpreting written orders/directions.

(3) Financial management skills—designed to assist learners in managing their personal finances and establishing a better understanding of everyday money matters in relationship to—

- bill paying,
- banking skills,
- savings accounts,
- checking accounts,
- expenses,
- use of credit cards
- buying a used car
- rental lease agreements

(4) Values clarification—designed to assist learners in examining their own values while they begin to develop those values more widely held by society in relationship to—

- developing pride, self-esteem, and responsibility/dependability;
- accepting criticism and rejection;
- assertiveness training;
- identifying acceptable human values;
- decision-making

(5) Job procurement and retention skills—designed to assist learners in grasping those skills that are essential to enter the world of work including—

- career awareness,
- assessing self abilities/qualities,
- job resources,
- finding out about companies,
- letters of application,
- job application forms,
- resumes,
- interviewing,
- employer relations,
- job retention,
- resigning,
- promotion,
- seeking a raise

Study Skills

Many disadvantaged students do not have adequate study skills to succeed in vocational programs. Vocational instructors and support staff should make a concentrated effort to help these learners establish and maintain positive study skills. Study skills that benefit disadvantaged students include the following:

- Concentration—a matter of focusing attention over a period of time.
  - Maintain good health.
  - Obtain proper amount of sleep.
  - Eliminate minor discomforts (i.e., hunger).
  - Plan rest and relaxation.
  - Believe in ability to learn.
  - Have strong desire to learn.

- Set goals.
- Plan study time.
- Develop good study habits.
- Use multisensory learning techniques (see, hear, say, write).

- Time Management—the process of systematically scheduling activities in order to promote their successful completion.

  - Use a monthly at-a-glance wall calendar. Give yourself a long-range view of expected tests and upcoming commitments.
  - Develop a weekly schedule. Fill in activities in priority order: fixed (lectures, work hours, travel); study time; leisure hours.
  - Plan to study when at your best.
  - Schedule review time just before class.
  - Attempt to study notes right after lectures.
  - Spread study sessions throughout the week.
  - Make a daily To-Do-List. (List duties in priority order; cross things out as they are completed.)
  - Be ready to revise your schedule if necessary.

- Listening and Notetaking—taking good lecture notes is a first step toward good test preparation.

  - Review notes from the previous class.
  - Preread the present assignment.
  - Become familiar with new terms.
  - Choose a seat where you can remain most attentive (usually up front).
  - Review as soon as possible after the lecture, ideally within 24 hours.
  - Fill in missing information using appropriate sources.
  - Clarify confused or disorderly notes.
  - Summarize the lecture briefly in your own words.
  - Number and date all notebook pages.
  - Get notes for any missed lectures.
  - Develop a personal system of notetaking that is comfortable but effective.
  - Use margins to note topics, main ideas and key words.
  - Write as much as you need to understand the content later.
  - Include main ideas, definitions, examples, important details, enumerations, repeated points, and board notations.
  - Review notes within 24 hours.

- Textbook Reading—necessary for success in most vocational programs.

  - Plan sufficient time to read assigned material carefully, allowing for the possible need to reread, look up new terms, and reflect.
  - Preview the selection.
  - Turn headings into questions and read to find the answers.
  - Mark information that will be needed later for test preparation.
  - Underline a portion at a time. Generally, read a paragraph to the end before deciding what is important enough to mark.
  - Mark only what you know is important.
  - Use a system for marking. (Underline main points and definitions, in the margin, write EX beside helpful examples.)

- Reading Comprehension– the act of gaining meaning from print.

  – Preview the selection by reading the title, introductory material, headings, and subheadings. Note graphics. Determine the author's organization.
  – Look for main ideas—summarizing statement, stated or implied, containing the author's main points.
  – Look for enumerations—lists of items that may or may not be numbered in the text.
  – Look for inferences—reasonable conclusions based on presented evidence.
  – Context clues—use surrounding text to gain meaning of unknown words.
  – Expand reading effort in a regular way.
  – Develop active listening skills in lectures, etc.
  – Use resources (glossary, dictionary, Thesaurus, Reader's Guide).

- Test Preparation– this process should begin on the first day of class.

  – Start early and study slowly.
  – Make sure you have a complete set of notes.
  – Study with others.
  – Find out what type of test it will be (objective, essay, mixture of both).
  – Prepare outlines from notes.
  – Overlearn what is difficult.

SUPPORT SERVICES

Program planning and instruction are simply not enough to ensure learning. Without support services to assist students through the educational system, many disadvantaged students drop out. The support system network personalizes the education and offers disadvantaged students an improved chance for success.

Counseling

Literature suggests that a critical component of support services, dropout prevention programs, and educational programs for the disadvantaged is increased communication and counseling with at-risk students. Personal concern and a high degree of involvement with at-risk students is necessary to establish trust and communication to convince them that someone cares. It is imperative that the rapport between disadvantaged students and someone in the educational system—teacher, counselor, administrator, or other support personnel—be established in order to motivate the students and increase attendance in academic and extracurricular activities.

Conrath (1986) said that more than one million young people who entered the ninth grade in 1981 did not graduate in 1985. In most states the dropout rates are between 20 and 30 percent. He believes that the problem is systematic—too many schools are impersonal, threatening, and confusing. Counselors or the counseling process alone cannot erase the systematic problems, but they can certainly help reduce the impersonal environment and the confusion to some extent. Larsen and Shertzer (1987) suggested that although school counselors cannot alone instill self-confidence and self-worth in all students, they can have a significant impact if they implement the following:

- Identify potential dropouts early. Make a list of excessive absences from class and low activity involvement in school activities, low or failing grades, difficulty communicating with teachers, etc. The signs are signals to at-risk students and should be noted so that efforts towards counseling these students can make a difference.

- Start support programs for those identified as potential dropouts. Provide one-on-one counseling or small group (6 to 10 students) support sessions to work on adjustment and other concerns students are struggling with while they are in school.

- Identify current extracurricular activities available to student and encourage high-risk students to find and join activities that interest them. Participation in extracurricular activities helps foster identification with the school and increase social interaction and a feeling of identity with the school environment.

- Encourage potential dropouts to enter work-study programs. Such programs offer an alternative to leaving school and also reinforce the work ethic taught in vocational classrooms. If the students see the application of the concepts and skills they are taught in the classroom, they are more likely to remain in school.

- Establish exit interviews for students who DO decide to drop out of school in spite of counseling efforts. Counselors can make referrals to social or community agencies that can assist students. It is also important that counselors identify alternatives for students and remind them that if they regret the decision to leave school, there are options for returning. For example, the General Educational Development certificate or Job Training and Partnership Act training programs are alternatives that might be suggested.

There are no easy remedies or solutions to the dropout and at-risk student situation. Counselors can only be alert to characteristics that identify students as potential dropouts, then target support services to help meet their needs. Keeping in contact with them on a regular basis communicates to students that someone cares and is willing to assist them, given the opportunity.

Lust (1984) provides the following suggestions and techniques for counseling special needs students:

- Build rapport.
  - — Maintain a sense of humor.
  - — Establish an open-door policy.
  - — Be patient.
  - — Be tactful.
  - — Learn about the student's background/culture
- Promote a positive self-concept.
  - — Provide positive role models (films, guest speakers, field trips).
  - — Help the student to identify strength and limitations.
  - — Establish structure.
  - — Follow-up on students.
- Refer students to other professionals.
  - — guidance and counseling staff
  - — school psychologist
  - — school nurse
  - — visiting teacher (welfare groups, juvenile courts)
  - — local Job Training Partnership Act (JTPA) program
  - — community mental health centers
  - — civic groups (Lions, Jaycees)
  - — community support groups (YMCA, YWCA, Big Brothers/Sisters, Alcoholics Anonymous)

Career Development Plans

Disadvantaged students often lack worker role models, work experience, career development experiences. Many of these learners will benefit from career development and long range planning. King-Fitch (1983) identifies specific information or activities that should be provided for disadvantaged learners so that educators will—

- identify these relevant factors to be considered in career planning:

  - vocational program or training in which the student is enrolled
  - short term employment goals
  - long range goals, if identified
  - vocational assessment results (skills, abilities, aptitudes, experiences, attitudes, interests)
  - occupational requirements, rewards and opportunities related to career goal
  - opportunities for advancement (career ladder)
  - factors that may effect successful education, training or advancement (transportation, time, money, family situation, academic ability, etc.)

- review the following diagnostic information to assist disadvantaged students in developing a self-awareness:

  - academic strengths, limitations and interests
  - support services available (tutoring, remedial instruction, counseling)
  - physical capabilities and limitations
  - vocational assessment results
  - life skills (money management, grooming, interpersonal skills, communication skills)

- provide these self-awareness activities to help students see their interests, abilities, and other factors that relate to their long-range career goals:

  - interest inventories
  - checklists of abilities and aptitudes
  - student interviews

- utilize these values clarification games and materials to help students realize what is important to them:

  - present a list of career characteristics related to different occupations (working with hands, working with people, solving problems)
  - present value conflicts for discussion (role playing, video presentations)
  - relate vocational and academic course requirements to careers
  - make your class reflect the real world (tight schedules, quality control, employability skills)
  - provide accurate, up-to-date, bias-free career information (printed materials, guest speaker, audiovisual materials, field trips, career simulations)

- encourage students to expand their horizons in the following ways:

  - provide support and encouragement
  - provide positive, honest career counseling (one-on-one, small group, parent conferences)
  - utilize the career ladder concept
  - provide a role model for students (instructors, community volunteers, parents, employers)
  - provide information on employment rights and responsibilities (affirmative action information, financial assistance, work setting modifications)

- help students to define short- and long-range goals by:

  — pointing out different possibilities to examine in relationship to their interests, abilities, and special needs (multiple exit points)
  — encouraging students to keep their options open

- help students to develop the following plan of action:

  — steps to achieve
  — relevant classes on activities in school
  — outside activities (clubs, volunteer work, tutorial help)

One instrument that can be used effectively to document long and short range career goals as well as support services that will be necessary for a disadvantaged student is a career plan. Gysbers (1983) identifies the following components that can be incorporated into a career development plan:

- Worker Role. Information could be recorded about worker role competencies such as—

  — interest information,
  — aptitude data,
  — tasks performed around home and school,
  — jobs individuals have had.

- Consumer/Citizens Role. Information could be recorded about consumer competencies and could include—

  — listing of community resources used or available —purchase and/or maintaining of housing (if applicable).

- Learner Role. Information could be recorded about educational background including—

  — official transcripts,
  — lists of student competencies,
  — informal learning experiences,
  — extracurricular activities.

- Individual Role. Information could be recorded about—

  — personal appearance notes,
  — leisure time interests,
  — health records.

- Family Member Role. Information could be recorded about the student's family background including—

  — family members,
  — family crises and what was done to handle them,
  — available family anecdotes.

- Career Growth Action Steps. Information could be recorded about the career path the student has selected including—

  - short range goals;
  - long range goals;
  - specific action steps;
  - possible role models, mentors, and/or work/community experience;
  - support services needed.

Peer Tutoring and Cooperative Learning

Peer tutoring is an instructional technique that involves collaborative learning that can assist disadvantaged students in academic achievement, social skills, and cognitive skill development. Ashley et al. (1986, p. 8) describe the benefits of peer tutoring programs as follows:

- tutors make significant gains in understanding content they are reinforcing.
- tutors reduce the teaching load for the teacher.
- tutors identify closely with the tutees.
- tutors are more economical to employ than additional instructors or paraprofessionals.
- tutees feel less threatened with tutors and are exposed to positive role models.
- tutees discover their own strengths and increase their self-confidence as they learn.
- tutees often feel that tutors present content in a more interesting fashion than the instructor.

Planning a peer tutoring program should involve the following phases:

- Developing program policies
- Developing program services
- Hiring personnel or tutors
- Purchasing and ordering
- Developing instructional materials
- Planning facilities
- Managing budget and payroll
- Providing orientation and inservice training
- Developing forms
- Preparing monthly/quarterly reports

- Establishing and maintaining student files
- Evaluating the program
- Providing public relations/information
- Coordinating faculty participation

According to Ashley et al. (pp. 27-28), evaluation of the peer tutor program can be completed by analyzing the following information:

- Number of students served
- Cost per student
- Actual increase in student's grade point average (GPAs)
- Changes in activities, attendance, and course completion rates
- Number of teachers participating
- Increase in rate of teacher participation
- Number of requests for program information
- Number of training sessions
- Volume of information disseminated
- Number of tutors trained
- Number of tutees who complete program
- Dropouts and causes

Cooperative learning can also be a very successful instructional strategy for disadvantaged students. The interaction among students in an instructional setting is very important and can greatly affect interpersonal relationships and self-concept.

Cooperative learning is achieved by assigning a group goal and a criteria-referenced evaluation system. The group members are rewarded on the basis of their group performance.

Research indicates the importance of cooperative learning experiences for both cognitive and affective instructional outcomes. Johnson and Johnson (1974, 1975) and Johnson (1979) report that—

- the successful mastery, retention, and transfer of information is higher in cooperatively structured learning than in competitively or individually structured learning,
- student motivation to learn is higher in cooperative learning situations than in competitive or individual ones;

- the cognitive and social development of students better facilitated by cooperative than by competitive or individual learning experiences;
- student attitudes toward teachers, other school personnel (principals, teacher aides, counselors) and subject areas are more positive in cooperative learning experiences than in competitive and individual learning experiences;
- students like their classmates more in cooperative than in competitive or individual learning situations, including classmates from different ethnic groups, the opposite sex, different social classes, and classmates who are intellectually and physically handicapped; and
- student self-esteem and psychological health is generally more positive in cooperative than in competitive and individual learning situations.

Johnson and Johnson (1975) provide the following suggestions concerning the teacher's role in cooperatively structured learning:

- Specify the instructional objectives.
- Select the group size most appropriate for the lesson. The optimal size of a cooperative group will vary according to the resources needed to complete the lesson or project, the cooperative skills of group members, and the nature of the task.
- Assign students to groups. Random assignment usually ensures a good mixture of males and females, highly verbal and passive students, leaders and followers, and enthusiastic and reluctant learners.
- Cluster the groups of students so that they will not interfere with each other's learning. Within the groups students should be able to see the relevant materials, converse with each other, and exchange materials and ideas.
- Provide appropriate materials. When students are first learning how to cooperate, or when some students are having problems in contributing to the group's work, teachers may wish to arrange the materials like a jig-saw puzzle and give each group member one piece.
- Explain the task and the cooperative goal structure so that students realize that there is a group goal, a criteria-referenced evaluation system, and that all members will be rewarded on the basis of the quality of the group's work.
- Observe the student-student reaction. Much of the teacher's time in cooperative learning situations is spent observing student groups to see what problems they are having in functioning cooperatively.
- Intervene to help the group solve its problems in working together effectively and to help group members learn the interpersonal and group skills necessary for cooperating.
- Evaluate the group products, using a criteria-referenced evaluation system.

Cooperative Planning

A team approach is usually the best method to ensure that disadvantaged students receive appropriate services that are necessary for them to succeed in vocational training and employment settings. Sarkees and Scott (1985) list potential services that may be needed to assist disadvantaged students in becoming employable. The list could include—

- career development activities,
- vocational assessment services,
- guidance and counseling,
- curriculum modification,
- specific skill training,
- remedial assistance (basic skills),
- prevocational skills,
- employability and work adjustment skills,
- diagnostic and related services,
- placement and follow-up services,
- transition services,
- family counseling,
- transportation, and
- financial planning/assistance.

It would be difficult for any one person or any one agency to provide all of these services. Hagebak (1982) states that a cooperative planning approach at the state and local levels can help reduce service duplication, fragmentation, gaps in services, and unnecessary expense.

Ferrini, Matthew, Foster, and Workman (1980) identify the following particular benefits of cooperative planning in the various sectors of society:

Education

- access to a wider range of expertise, information, and contacts when serving special needs students
- development of cost efficient services

Service Organizations

- access to more job placement opportunities for special needs individuals
- greater community understanding of services available

Business and Industry

- obtain more and better trained workers
- access to referrals and support systems for special needs individuals

School-based cooperative planning can include the following individuals:

- Administrators
- Vocational instructors
- Academic instructors
- Remedial/basic skills instructors
- Counselors
- School psychologists
- Social workers
- Vocational special needs personnel
- Curriculum coordinator
- Tutors (peer, volunteer)

Agencies and community organizations that could be involved in cooperative planning include:

- Juvenile Services
- Department of Social Services
- Child and Family Services
- State Employment Commission
- Mental Health Center
- Community Services Board
- Department of Public Health

- Job Training Partnership Act (JTPA) Representative
- Employers
- Labor

According to Ferrini, Matthew, Foster, and Workman (1980, p. 198), when coordinating the services of agencies and community, the following information should be used in planning:

- Philosophy and goals of the agency
- Description of clients served
- Age ranges for providing services
- Eligibility criteria for services
- Services provided
- Staffing patterns and ratios, funding sources and patterns
- Evaluation of services provided
- Data collected for reports
- Terminology relevant to agency

Tindall (1982) reviewed 10 exemplary programs of vocational preparation for special needs learners. Tindall (p. 199) found that the following activities were common in the successful implementation of cooperative or interagency agreements:

(1) Team members agreed upon a plan of action.

(2) The team members spent considerable time in developing community relations and the education of the community concerning the interagency approach.

(3) Each agency did its task to keep students moving through the program. Several individuals cooperated to coordinate the flow of students through the program. Someone was assigned to follow each student through the program.

(4) There was a continuous sharing of information.

(5) A multidisciplinary approach was used in making decisions.

(6) There was a broadly based interdisciplinary team.

(7) School based teams coordinated closely with administrator-

Resource Personnel

States have different models of various support services, yet one support service that varies among the states is the concept of resource personnel--someone in addition to the peer tutors, counselors, parents, and the teachers, another professional who acts a student's advocate and will offer additional support services, whatever else they might be.

Each student's needs for support services will be very different, depending upon the complicating circumstances surrounding the students. Once a student has been identified as disadvantaged, the support services team of professionals may determine an additional need that has not yet been addressed through the other services, such as social services, family counseling or financial assistance. The liaison between the student and the outside agency would likely be a resource person, who may have a variety of responsibilities.

Resource personnel combine the efforts of the education system with the efforts of these agencies in the community that impact on a student's well-being and education.

RECOMMENDATIONS

There are many challenges that face educators in providing quality and individualized instruction for disadvantaged youth. Long-range planning and a positive learning environment are essential elements to the philosophical approach for disadvantaged students. The following recommendations are intended for educators at the local and state levels, teacher educators who are preparing future and current teachers through preservice and inservice training programs and for leaders and policymakers who set the national agenda for the disadvantaged:

- Consider the entire problem of the "disadvantaged" in program planning and program implementation.

  Usually when the when the term "disadvantaged" is used, many people think of academic disadvantages. However, there are other significant factors that can affect the student's educational program, including economic conditions, health factors and cultural and linguistic factors. The total picture of each disadvantaged student must be established in order to adequately plan for an appropriate educational program.

- Establish and/or expand parent education programs.

  Parents can be a primary source of important information concerning student interests, abilities, and needs. They can also help to plan and reinforce the educational and career goals that are being implemented in the schools.

- Establish a better tracking mechanism for dropouts, including a comprehensive outreach component so they can feel free to return and complete school.

  In order to plan effective programs for dropout prevention or appropriate alternative components for the educational system, we must determine the reasons that students are leaving school. An effective tracking system could help to accomplish this objective as well as inform dropouts of the options available to them to continue their education.

- Expand programs and services to an earlier age.

  Providing early entry into exploratory middle school and vocational programs can prevent potential dropouts from leaving school. This should occur as early as the middle school grades.

- Incorporate and emphasize generalizable skills into existing academic and vocational curricula.

  A functional, relevant, and conducive curriculum has greater significance to the reality of disadvantaged students. A generalizable skills approach can help to develop basic skills within the context of vocational programs and employment settings.

- Improve interagency coordination.

  A cooperative team approach in schools among vocational instructors, vocational special needs personnel, basic skills and remedial instructors, counselors, and administrators should be implemented to plan and implement programs and services for disadvantaged students. In addition, interagency planning with community organizations, local and state agencies, adult services providers, postsecondary representatives, and employers is essential in providing a full array of support services for this population.

- Establish alternative delivery strategies for students who drop out from day school.

  Alternative programming options such as flexible hours, weekend programs, community-based programs, evening classes, and work experience for credit programs may better meet the needs of disadvantaged individuals. Some students may need to work at a job around school hours in order to supplement the family income. The more flexible the education program, the greater the chance that more at-risk individuals will continue their education.

- Expand instructional strategies and models that work well with disadvantaged populations.

  Models and instructional strategies (e.g., peer tutoring, cooperative learning) that are successful in meeting the needs of disadvantaged students should be shared with administrators and educational personnel so that appropriate models can be established and implemented at the local school level.

- Plan, organize, and conduct continuous professional development opportunities for educators working with disadvantaged populations.

  Educational personnel who work with disadvantaged students should be provided with inservice training regarding effective practices such as teaching strategies, effective discipline practices, cooperative learning versus competitive learning environments, group counseling strategies, and motivational strategies.

- Coordinate and implement a comprehensive career development and employability skills process for disadvantaged students.

  Most disadvantaged students lack work experience and worker role models. A career development process beginning in the primary grades and incorporating the stages of career awareness, career orientation, career exploration, and career preparation should be established. Prevocational, employability, and functional skills should be infused into this process at all stages.

- Utilize successful individuals who come from similar disadvantaged populations to "tell their story" as guest speakers, counselors, and partners in industry.

  Role models can help disadvantaged students to reflect on their own interests and needs and formulate positive realistic long and short term career goals.

- Establish a clearinghouse concerning dropout prevention.

  Educators should have access to dropout prevention information such as key contact people in associations, school districts, and organizations, conferences and programs relative to

the issue: model programs established to retain high-risk students in school; and publications. This continuous, up-to-date source of ideas should help state and local educators improve current practices and programs aimed at meeting the needs of disadvantaged students.

- Expand services available to disadvantaged students.

  Local districts must examine services that are currently available as well as additional services that could be added to the educational process to encourage disadvantaged students to stay in school and succeed (e.g., family intervention, counseling services, health clinics, day care facilities for single parents, academic and employability skills remediation).

These recommendations have been set forth as guidelines and suggestions for educators working with disadvantaged students in the vocational education programs or who will work with them in the future. The future holds a new beginning for students who would otherwise suffer from underemployment or unemployment.

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